



## SAP Cloud ALM for Operations Enablement: Integration & Exception and Business Process Monitoring

The Business Process Monitoring app in SAP Cloud ALM for operations supports the detect-to-correct lifecycle of SAP Cloud solutions along the end-to-end processes of the Intelligent Suite.

Business process monitoring aims to provide transparency about the end-to-end process health based on predefined [key performance indicators \(KPIs\)](#). It enables both line-of-business users and IT users to directly identify business process disruptions across the entire system landscape, and to react to anomalies before critical situations arise.

The objective of this app is to ensure smooth business operations without disruptions, and to increase the quality and performance of the business process execution.

For further details see the [overview presentation](#).

The following end-to-end processes based of the Intelligent Suite are supported:

- Recruit to Retire
- Lead to Cash
- Source to Pay
- Design to Operate

The purpose of Integration & Exception Monitoring is to provide transparency for the data exchange processes. It supports the monitoring for peer-to-peer interfaces as well as interfaces using orchestration platforms and provides a unified user experience for all interface types using a common look-and-feel and handling pattern.

Integration & Exception Monitoring closes the gap between IT and Business. The correlation of integration artifacts provides end-to-end visibility in interface calls and message flows cross all involved cloud services and systems.

Users of Integration & Exception Monitoring can analyse the actual processing of interface calls and message flows including possible technical or business-driven root causes.

Integration & Exception Monitoring provides the following functionalities:

- Message Monitoring
- Message Search (Tracking)
- Alerting on failed messages or exceptions

## PREREQUISITES

- Provision an SAP Cloud ALM instance for your customer ID.
- Any user responsible of integrating systems must be added as an *org-manager* in the Cloud Foundry subaccount where SAP Cloud ALM was instantiated. See how in the [Help Portal](#)
- **For SAP Cloud ALM:**
  - In the subaccount that contains your SAP cloud ALM subscription, you have a security administrator user.
- **For SAP S/4HANA Cloud Public Edition:**
  - You have the following business roles for SAP S/4HANA Cloud:  
SAP\_BR\_CONF\_EXPERT\_BUS\_NET\_INT  
SAP\_BR\_ADMINISTRATOR
- **For SAP Cloud Integration:**
  - Identify the environment where SAP Cloud Integration is running: Neo or Cloud Foundry and the identity configuration used in the SAP BTP subaccount.
    - URL of a Neo tenant looks like: `https://<tenant Id>tmn.hci.<landscape>.hana.ondemand.com/`
    - URL of a Cloud Foundry tenant looks like: `https://<tenant Id>.<system id, e.g. it-cpi001>.cfapps.<landscape>.hana.ondemand.com/`
- **For SAP SuccessFactors:**
  - Have permission to access Integration Registration Service
  - For Integration & Exception Monitoring:
    - Have an API user with SFAPI permissions
  - Additionally, for Business Process Monitoring
    - Have an API user with OData permissions
  - Note: Both API users can be the same. If so, only one endpoint will need to be created.
- **SAP ABAP (S/4HANA on-premise) system:**
  - SAP\_BASIS 7.40 SP20 or higher (accordingly 7.50 SP04)
  - Install ST-PI 7.40 SP14 or higher
  - Implement SAP note 2985521- Collective corrections as of ST-PI 7.40 SP14 for SAP Cloud ALM
  - Implement SAP note 3054258 - Collective corrections as of ST-PI 7.40 SP15 for SAP Cloud ALM
  - Check that profile parameter `icm/HTTPS/client_sni_enabled` is set to TRUE (see also note 510007 - Additional considerations for setting up SSL on Application Server ABAP)
  - Required Authorizations:
    - To run transaction `/SDF/ALM_SETUP` you need the PFCG role `SAP_SDF_ALM_SETUP`
    - The user you specify as Background User, requires the PFCG role `SAP_SDF_ALM_COLLECTORS_JOBS` and `SAP_SDF_ALM_METRIC_PUSH_BPMON`, attached to SAP note [3054258](#)

# LAB ACTIVITIES TO BE COVERED

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To enable communication from other systems to SAP Cloud ALM, an SAP Cloud ALM API service instance and a service key need to be created within the SAP BTP cockpit.

Follow the next two lab activities to obtain the service key details. You can also find the steps in the Help Portal: [click here](#).

### LAB ACTIVITY #1 Create the SAP Cloud ALM API service and service key

In this exercise you will create a service key. It holds all the information needed to integrate other systems, like SAP S/4HANA Cloud and SAP SuccessFactors.



These steps need to be performed in the subaccount where SAP Cloud ALM was provisioned. A link to the subaccount was sent to the user that requested the instance. Any user that will integrate systems to SAP Cloud ALM should be assigned as an org-manager in the subaccount.

1. Go to BTP cockpit of the subaccount provisioned for SAP Cloud ALM.
2. If there are no spaces, create one.
3. Confirm that there are entitlements for the SAP Cloud ALM API service. Add the entitlement if missing (service: SAP Cloud ALM API, plan: standard).

Service	Plan	Assign Quota	Subaccount Assignment	Remaining Global Quota	Actions
API Management	lite		1 shared units	1 shared units	
Cloud Foundry Runtime	MEMORY	<input checked="" type="checkbox"/>	1 units	5 units	
Cloud Transport Management	standard		1 shared units	1 shared units	
	standard (Application)		1 shared units	1 shared units	
Open Connectors	standard (Application)		1 shared units	1 shared units	
Process Integration Runtime	integration-flow		2 shared units	2 shared units	
SaaS Provisioning Service	application		1 shared units	1 shared units	
SAP Cloud ALM	standard (Application)		1 shared units	1 shared units	
<b>SAP Cloud ALM API</b>	standard	<input checked="" type="checkbox"/>	1 units	1 units	
SAP Cloud ALM PreProd	standard (Application)		1 units	0 shared units	
SAP Integration Advisor B2B Library	asc_x12	<input checked="" type="checkbox"/>	1 units	0 units	
	unedifact	<input checked="" type="checkbox"/>	1 units	0 units	

4. Go to Service Marketplace and create an SAP Cloud ALM API service instance

SAP BTP Cockpit

Global Account / SAP Cloud ALM subaccount

Services

Service Marketplace

Instances and Subscriptions

Cloud Foundry

HTML5 Applications

Connectivity

Security

Entitlements

Usage Analytics

Subaccount: SAP Cloud ALM subaccount

Service Marketplace

Filtered: 2 of 24

alm

Extension Suite - Development Efficiency

SAP Cloud ALM API

SAP Cloud ALM API

Integration Suite

SAP Cloud ALM

SAP Cloud Application Lifecycle Man...

SAP Cloud ALM API

name: SAPCloudALMAPIs

Create

Overview

Service Plans

SAP Cloud ALM API

Service Plans

Choose a service plan to create an instance of this service.

Plan	Description	Environments	Active
standard	SAP Cloud ALM API Standard Plan <a href="#">More</a>	Cloud Foundry, Kyma, Kubernetes, Other	1 instance

5. Once ready, click on the instance and create a service key

SAP BTP Cockpit

Global Account / SAP Cloud ALM subaccount

Services

Service Marketplace

Instances and Subscriptions

Cloud Foundry

HTML5 Applications

Connectivity

Security

Entitlements

Usage Analytics

Subaccount: Cloud ALM subaccount

Instances and Subscriptions

Create

Search

All Services

All P...

All Stat...

Subscriptions (3)

Instances (3)

Environments (1)

Applications to which your subaccount is currently subscribed

Application	Plan	Created On	Changed On	Status
	standard	04/06/2020	29/06/2021	Subscribed
	standard	13/07/2020	13/07/2020	Subscribed
	standard	16/02/2021	23/06/2021	Subscribed

Instances (3)

Service instances created in: Cloud Foundry | Kyma/Kubernetes | Other environments

Instance	Service	Plan	Runtime E...	Scope	Status
	subaccount...	Cloud Fou...	dev	Created	
	SAP Cloud ALM API	standard	Cloud Fou...	dev	Created
	standard	Cloud Fou...	dev	Created	

SAP Cloud ALM API

View Credentials

Instance ID: 7a9b7760-14b

Service: SAP Cloud ALM API (SAPClou...

Plan: standard

Runtime Environment: Cloud Foundry

Space: dev

Status: Created

Bound Applications (0)

Create

Name

Status

No bound applications.

Service Keys (1)

Create

Name

CALMSKEY

1. Go to BTP cockpit of the subaccount provisioned for SAP Cloud ALM.
2. Click in the subaccount provisioned for SAP Cloud ALM
3. Access the space where the “SAP Cloud ALM API” service instance is running. Click in the service instance

The screenshot shows the SAP BTP Cockpit interface. The left sidebar contains navigation links for Applications, Services, Service Marketplace, Instances, SAP HANA Cloud, SAP HANA Cloud Migrations, Portal, Routes, Security Groups, Events, and Members. The main area displays the 'Space: dev - Service Instances' page. A table lists the following instances:

Instance	Service	Plan	Status
AdHub	Service Manager	subaccount...	Created
AdHub...	SAP Cloud ALM API	standard	Created
TMS	Transport Management	standard	Created

The right sidebar shows the 'AdHubCLAMAPI' service details, including a 'Service Keys (1)' section with a 'Name' field containing 'AdHubCALMSKEY'.

4. Click in the service key name. Copy the values for later:
  - a. **Endpoint:** api > endpoint (remove the last “/api”)
  - b. **Client ID:** uaa > clientid
  - c. **Client secret:** uaa > clientsecret
  - d. **Token URL:** uaa > url
  - e. (Copy the full json file if integrating S/4HANA on-premise)



Please note that Service Key must be stored securely outside BTP Cockpit



As a result of this exercise, you should see/have a client ID and Client Secret available to set up the connection between the destination service of your managed system and individual SAP Cloud ALM applications

### LAB ACTIVITY #2: Integrate SAP S/4HANA Cloud into SAP Cloud ALM

To integrate SAP S/4HANA Cloud, you need to create a communication arrangement and a communication system for it. You will create two arrangements, one for *Business Process Monitoring* and another for *Integration and Exception Monitoring*.

#### Create Communication System

1. Log on to the SAP Fiori launchpad in the SAP S/4HANA Cloud system.
2. In the Fiori launchpad, open *Communication Systems*.
3. Click New to create a new communication system.
4. On the New Communication System screen, enter the following values:
  - a. System ID: Enter a value. For example, CLOUDALM
  - b. System Name: Enter a system name. For example, CLOUDALM
5. Click Create.
6. On the Communication System screen, enter the following values:
  - a. **Host Name:** Your SAP Cloud ALM host name depends on the data center where you SAP Cloud ALM tenant is hosted without the initial "https://".  
E.g.: eu10.alm.cloud.sap
  - b. **Port:** 443
7. In **OAuth 2.0 Settings > Token Endpoint**. Enter the Token URL adding "/oauth/token" at the end.  
E.g.: https://company-name.authentication.eu10.hana.ondemand.com/oauth/token
8. In the area **User for Outbound Communication**, choose **Add** and maintain the following entries on the New Outbound Communication User screen:
  - a. **Authentication Method:** choose OAuth 2.0
  - b. **Client ID:** Enter the client id from the service key
  - c. **Client Secret:** Enter the client secret from the service key
9. Save the communication system

#### Create Communication arrangement

1. Log on to the SAP Fiori launchpad in the SAP S/4HANA Cloud system.
2. In the Fiori launchpad, open *Communication Arrangements*.
3. Click New.
4. On the New Communications Arrangements screen, maintain the following values:
  - a. Scenario: Choose **SAP\_COM\_0523** (Business Process Monitoring Push Integration).
  - b. Click Create.



5. On the Communications Arrangements screen, enter the following values:
  - a. **Communication System:** Choose the communication system you have created in the Communication Systems page. For example, CLOUDALM.  
After you have selected the communication system, the value is also updated for the Outbound Communication.
6. In the Outbound Services section, enter the Path and Service URL for each of the outbound service as follows:
  - a. SAP Cloud ALM - BPMon Configuration:  
**Path:** Enter "/" (just a slash)  
**Job Execution Details:** Run Every 1 Hour
  - b. SAP Cloud ALM - BPMon Data  
**Path:** Enter "/" (just a slash)  
**Job Execution Details:** Run Every 1 Minute
7. Click Save.
8. After the successful activation the data collection will start, and the S/4HANA Cloud tenant will appear in the Configuration pane in the **Business Process Monitoring** application.

To enable **Integration and Exception Monitoring**, create another communication arrangement:

1. On the New Communications Arrangements screen, maintain the following values:
  - a. Scenario: Choose **SAP\_COM\_0527** (Application Monitoring Push Integration).
  - b. Click Create.
2. On the Communications Arrangements screen, enter the following values:
  - a. **Communication System:** Choose the communication system you have created in the Communication Systems page. For example, CLOUDALM.  
*After you have selected the communication system, the value is also updated for the Outbound Communication.*
3. In the Additional Properties section, enable with an X the properties:
  - a. Collect Exceptions
  - b. Collect Integration Monitoring

Note: These are the required properties, but you can enable the rest as well.

4. In the Outbound Services section, enter the path and the job execution details:
  - a. SAP Cloud ALM for operations - Scheduler:  
**Path:** Enter "/" (just a slash)  
**Job Execution Details:** Run Every 1 Minute
5. Click Save.



As a result of this exercise, you should see/have SAP S/4HANA Cloud connected to Cloud ALM. Please note that the data collection on the SAP Cloud ALM takes some considerable time for the initial load of data.

### ***Review prerequisites***

As part of the prerequisites you would have identified whether your SAP Integration Suite – Cloud Integration tenant runs on Neo or SAP Cloud Foundry.

#### *Find your ID Provider*

Check if your tenant uses the SAP ID service or a custom Identity Provider (IdP).

1. Go to the SAP BTP Cockpit → Access the subaccount used for SAP Cloud Integration → Security → Trust Configuration
2. Check if a custom IdP is used. If there is only the "Default Identity Provider" you are using the SAP ID Service.



For the next step, customers who are using SAP Cloud Foundry cannot choose Basic authentication as the authentication method.

#### *Choose your Authentication Method*

- You can choose between BASIC or OAuth authentication to connect SAP Integration Suite - Cloud Integration to SAP Cloud ALM.
- SAP recommends using OAuth and this Adoption Lab will show the steps for this type of authentication
- If you want to use Basic Authentication, please refer to the guides in the Expert Portal: For [Cloud Foundry](#) and [Neo](#)



For the next step, in case you have not created an entitlement for SAP Integration Suite – cloud Integration Process Integration API, you can create this by navigating to SAP BTP Cockpit → Entitlements → Create Service Plan.

## LAB ACTIVITY #3 SAP Cloud Integration: Prepare and obtain OAuth Credentials

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### *For Cloud Foundry tenants*

To enable OAuth authentication between SAP Cloud ALM and SAP Cloud Integration you need to create an instance with a service key for the Process Integration service with the necessary authorizations. To be able to create the instance in the space for your SAP Cloud Integration you need "Space Developer" access to this space.

#### *Create Service Instance*

1. Go to your SAP BTP Cockpit → Access the subaccount used for SAP Cloud Integration
2. Go to *Instances and Subscriptions*
3. Click the 'Create' button to create a new instance
4. Basic Info
  - a. **Service:** Process Integration (it-rt)
  - b. **Plan:** api
  - c. **Runtime Environment:** Cloud Foundry
  - d. **Space:** Select the appropriate space (depending on your company)
  - e. **Instance Name:** Enter an instance name
  - f. Click 'Next'
5. Parameters
  - a. Select the role MonitoringDataRead in the 'Roles' drop-down on the Form tab
  - b. Click 'Create Instance'

#### *Create service key*

6. After the instance is created you can create the service key. Select the row of the instance
  - a. Go to tab *Service Keys*
  - b. Click 'Create'
  - c. Enter a name for the service key
  - d. Click 'Create'



Download the service key file. You will need the information in the file later when you create the endpoint in SAP Cloud ALM.

### **For Neo tenants**

To enable OAuth authentication between SAP Cloud ALM and SAP Cloud Integration you need to create an OAuth client and assign to it some roles. This is to be done in the subaccount where SAP Cloud Integration is located.

1. Go to the SAP BTP Cockpit → Access the subaccount used for SAP Cloud Integration
2. Navigate to *Applications* → *Subscriptions*
  - a. Note down the 'Provider Subaccount' for the application ending in tmn

#### *Create an OAuth client*

3. Navigate to *Security* → *OAuth*
4. Go to tab 'Clients' and click 'Register New Client'
  - a. **Name:** Choose a name
  - b. **Subscription:** Select the CPI tenant (ends with tmn)
  - c. **ID:** Choose an ID (it is recommended to use the suggested unique ID)
  - d. **Authorization Grant:** Select 'Client Credentials'
  - e. **Confidential:** True
  - f. **Secret:** Write a secret
  - g. **Token Lifetime:** Set to 60 minutes (or 1 hour)
  - h. Click on Save
5. Note down the **ID** and the **secret** for later use in SAP Cloud ALM
6. Go to tab 'Branding'
  - a. Note down the 'Token Endpoint' URL

#### *Add roles to new OAuth client*

7. Navigate to *Security* → *Authorizations*
8. As a user enter `oauth_client_<ID>` (the ID generated in the previous step)
9. Click in 'Assign' to assign the user some roles:
  - a. **Subaccount:** Select the subaccount that hosts the application ending in tmn
  - b. **Application:** Select the app ending in tmn
  - c. **Role:** Select
    - i. IntegrationOperationServer.read
    - ii. NodeManager.read
  - d. Save you changes.



You have now prepared and obtained the OAuth credentials for SAP Cloud Integration.

## LAB ACTIVITY #4 Create HTTP endpoint for SAP Cloud Integration

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In order to SAP Cloud ALM to bring information from SAP Cloud Integration, you need to create an HTTP endpoint in SAP Cloud ALM pointing to your SAP Cloud Integration tenant. You will use the details you got in the last lab activity.



Please note that before you can start the setup make sure that your cloud service was successfully imported from the System landscape Information Service (SLIS). If not, launch an import of subscribed SAP services.

1. Connect to SAP Cloud ALM.
2. Open the *Landscape Management* application from the launchpad
3. Select your *SAP Cloud Integration* service
4. Click on the name or press the > button at the end of the line
5. On the tab *Endpoints* press the 'Add' button to create a new endpoint:
  - a. **Name:** Leave the default or enter a unique name
  - b. **Use Case:** Choose 'Integration Monitoring' and 'Exception monitoring'
  - c. **Root URL:** SAP CI tenant URL. This should be already populated. Make sure that it does **not** contain the /itspaces suffix
  - d. **Authentication Type.** OAuth2ClientCredentials

**Cloud Foundry:** Take the following information from the service key created before:

- i. **Client ID:** clientid
- ii. **Client Secret:** clientsecret
- iii. **Token Service URL:** tokenurl

**Neo:** Take the following information from the registered client:

- i. **Client ID:** ID
- ii. **Client Secret:** Secret
- iii. **Token Service URL:** Token Endpoint
- iv. **Token Service User:** ID (again)
- v. **Token Service Password:** Secret (again)

6. Save your entries.

Edit Endpoint

?

General

Endpoint Name: \*

SAP\_Integration\_S\_01

Description:

Use Case: \*

Exception Monitoring x Integration Monitoring x

✓

Root URL: \*

https://[redacted]-tmn.hci.us2.hana.ondemand.com

Connection Test Path:

/api/v1

Authentication

Authentication Type:

OAuth2ClientCredentials

⌵

Client ID: \*

[redacted]16-33c6-93ef-68a61b2958f0

🔑

Client Secret: \*

.....

Token Service URL: \*

https://oauthservice[redacted].us2.hana.ondemand.com/oauth2/api/

🔑

Token Service User:

[redacted]16-33c6-93ef-68a61b2958f0

🗨

Token Service Password:

.....

Check Connection

Save

Cancel



As a result of this exercise, you should see/have SAP Cloud Integration connected to SAP Cloud ALM.

## SAP SUCCESS FACTORS

To enable SAP SuccessFactors to send monitoring data to SAP Cloud ALM you need to register SAP Cloud ALM at the *Integration Service Registration Center*.

This will enable *Business Process Monitoring* app and will also bring *SAP SuccessFactors Messages* into *Integration and Exception Monitoring* app.

If you have jobs in Integration Center, scheduled Jobs and middleware integrations, you will need to create an HTTP endpoint in SAP Cloud ALM to bring that data to *Integration and Exception Monitoring* (see next lab activity).

### LAB ACTIVITY #5 Register SAP Cloud ALM in SAP SuccessFactors

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To enable SAP SuccessFactors to send monitoring data to SAP Cloud ALM you need to register SAP Cloud ALM at the *Integration Service Registration Center*.

#### *Review prerequisites*

To be able to perform this setup, your user needs Access to Integration Service Registration Center UI permissions.

1. Go to *SAP SuccessFactors Admin Center*.
2. In the Tools Search field, enter *Manage Permission Roles*.
3. Select a relevant role for your user or create a new one.
4. Under *Permission Settings*, choose *Permission*.
5. Go to *Manage Integration Tools* and select *Access to Integration Service Registration Center UI*.
6. Choose *Done*.
7. Choose *Save Changes*.

#### *Register your SAP Cloud ALM tenant*

With the data collected from the SAP Cloud ALM API service key:

1. Go to *Admin Center*
2. In the Tools Search field, search for *Integration Service Registration Center*
3. In the following screen enter the following values:
  - a. **System Type:** Enter the role of the SAP SuccessFactors system as DEV, TEST or PROD
  - b. **Description:** Enter a description, e.g., "SFSF Prod tenant"
  - c. **Endpoint:** Cloud ALM endpoint URL, e.g., <https://eu10.alm.cloud.sap>
  - d. **OAuth URL:** Cloud ALM OAuth URL, e.g., <https://cf-org.authentication.eu10.hana.ondemand.com/oauth/token>
  - e. **Client ID:** Cloud ALM client ID
  - f. **Client Secret:** Cloud ALM client secret
4. Click Register

5. Click OK

BestRun Home Search for actions or peo... 10

Back to Admin Center/

Integration Service Registration Center

Integration Service: \* SAP Cloud ALM

Tenant Details

Company ID: SFI

Company Name: SAP

System Type: TEST

Service Type: SAP SuccessFactors

URL: https://...com

Description: SAP Cloud ALM Monitoring

Service Details

Endpoint: \*

OAuth URL: \* https://...tion.eu10.hana.o...

Client ID: \* si...25[sa...

Client Secret: \* \*\*\*\*\*

Service ID: \*



As a result of this exercise, you should see/have Data Push mechanism setup successfully to send data to Cloud ALM

## LAB ACTIVITY #6 Create HTTP endpoint for SAP SuccessFactors

The endpoint needs to be created to support PULL data collection. This is done in SAP Cloud ALM, in the Landscape Management app.



You can use the same API user for “Integration & Exception Monitoring” and “Business Process Monitoring”, that way, only one endpoint is necessary. If the two users are different, repeat the process choosing the relevant use case for each user.

Please follow the steps mentioned below:

1. In SAP Cloud ALM, access *Landscape Management*
2. Find your SAP SuccessFactors and click on the name or the > button.
3. Click on Add in the Endpoint section to create a new one:
  - a. **Use Case:** Choose “Exception Monitoring” and “Business Process Monitoring”
  - b. **Root URL:** Enter the Production System API URL for your datacenter (see [SAP note 2215682 - Successfactors API URLs for different Data Centers](#))
  - c. **Authentication Type:** Choose Basic authentication
  - d. **User:** <user>@<companyID> with the API user created in SAP SuccessFactors
  - e. **Password:** The password for the user



The screenshot shows the 'Edit Endpoint' dialog box in SAP Landscape Management. The dialog is divided into two sections: 'General' and 'Authentication'. In the 'General' section, the 'Endpoint Name' is 'SAP\_SF01', the 'Description' is 'SAP\_SF01', the 'Use Case' is 'Exception Monitoring', and the 'Root URL' is 'https://...'. The 'Authentication' section shows 'Authentication Type' as 'Basic Authentication', with 'User' and 'Password' fields. A 'Check Connection' button is located below the password field. At the bottom right of the dialog are 'Save' and 'Cancel' buttons. The background shows the SAP Landscape Management interface with a list of endpoints.

**Edit Endpoint**

**General**

Endpoint Name: SAP\_SF01  
Description: SAP\_SF01  
Use Case: Exception Monitoring  
Root URL: https://...  
Connection Test Path:

**Authentication**

Authentication Type: Basic Authentication  
User: ...  
Password: ...  
Check Connection

Save Cancel



As a result of this exercise, you should see/have SAP SuccessFactors bringing data to Integration and Exception Monitoring in Cloud ALM.

### LAB ACTIVITY #7 Introduction to Business Process Monitoring

In SAP Cloud ALM you can easily activate the standard monitoring content without any additional setup effort. You can change which parts of the standard content are activated for each cloud service; activate and deactivate alerts or create own alerts with specific filters. In the Business Process Monitoring app, you can monitor your end-to-end business processes with the help of predefined key performance indicators (KPIs)



Please note that the standard monitoring will be activated as soon as you complete the setup and toggle to activate

Activate/Deactivate the Business Monitoring for SAP S/4HANA Cloud Public Edition and SAP SuccessFactors.

Add to favourites to view the KPI in the first view. The KPI management will allow to deactivate or activate the KPIs the business users are interested to view.

please follow the steps mentioned below to deactivate/activate the KPIs:

1. From CALM Home page, go to Business Process Monitoring.
2. Click in the gear at the top right to open the Configuration menu
3. Select the KPI management section and click on the button "Manage KPIs".
4. Select the KPI of interest and click on "Activate/Deactivate" button.

Manage KPIs / Billing Document Line Items Created

**Billing Document Line Items Created**

Lead to Cash > Order to Cash > Manage Billing & Invoicing

Deactivate

Activation Status: Active | Last Configuration Change: Sep 3, 2021 | Current Global Value: 5,636

Information | Alert Settings

Description:  
Measures the number of created sales invoice items.

KPI Category:  
Throughput

Technical Identifier:  
KPSD000249

Save Close

Adjust the alerting & Filter Configurations:

1. Open the KPI management Edit screen.
2. Select the KPI of interest and navigate to the “Alter settings”.
3. Click on the “Add” button.
4. Specify an alert name, warning and critical settings.
5. Specify the filters if required and click on the “save” button.
6. The alert should be displayed in the “alerting” tab on the Business Process Monitoring Screen.

Manage KPIs / Billing Document Line Items Created

**Billing Document Line Items Created**

Lead to Cash > Order to Cash > Manage Billing & Invoicing

Deactivate

Activation Status: Active | Last Configuration Change: Apr 15, 2021 | Current Global Value: 19

Information | Alert Settings

Alert Definition

Billing Documents Items Created

Warning: 1

Critical: 0

Reference Period in Days: 30

Save Close



As a result of this exercise, you should see/have SAP S/4HANA Cloud data visible in SAP Cloud ALM

## LAB ACTIVITY #8 Introduction to Integration & Exception Monitoring

---

In SAP Cloud ALM you can easily activate the standard monitoring content without any additional setup effort. You can change which parts of the standard content are activated for each cloud service, activate, and deactivate alerts or create own alerts with specific filters.



Please note that the standard monitoring will be activated as soon as you complete the setup and toggle to activate

please follow the steps mentioned below:

1. From CALM Home page, go to Integration & Exception Monitoring
2. Click in the gear at the top right to open the Configuration menu
3. Turn on the “Cloud Integration” or any other system that has been onboarded to Integration and exception monitoring.
4. Click in the pencil to open the Edit options for all systems

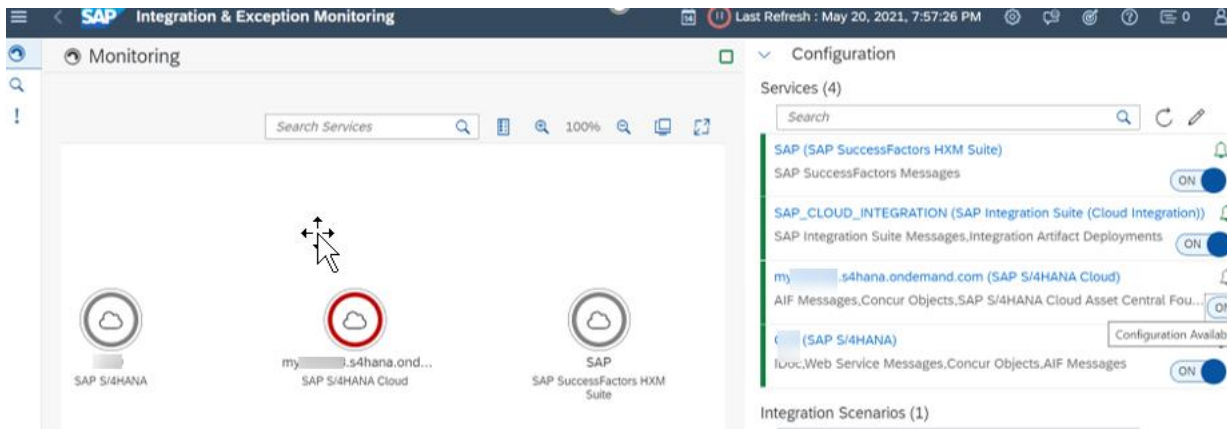
*Adjust the alerting & Filter Configurations*

### **Adjust Monitoring Categories**

1. Use the toggle button in the column Active to turn a monitoring category ON or OFF

### **Adjust Alerting**

7. Use the toggle button in the column Active to turn a standard alert ON or OFF.
8. Select the “Edit Services configuration” button to edit the settings.
9. Press the > button at the end of the line to access the detail setup for an existing alert or use the + button to create a new alert
10. Adjust the display name if desired
11. Expand the Filter Configuration tray
12. Enter a filter name
13. Select the filter category.
14. Save your entries.



As a result of this exercise, you should see/have SAP Cloud Solutions Integration and Exception Monitoring data is visible in SAP Cloud ALM

### LAB ACTIVITY #9 Maintain an SAP Cloud ALM Destination

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Integration & Exception Monitoring for SAP S/4HANA and SAP Business Suite uses a PUSH mechanism to push monitoring data to SAP Cloud ALM



Please make sure that the pre-requisites are complete before starting the steps

Please follow the steps mentioned below:

1. Call transaction `/n/SDF/ALM_SETUP`.
2. Register the target destination as SAP Cloud ALM
3. Update destination and paste the json from the security key (you can also enter the values manually)
  - a. You can copy & paste the content from the JSON file created during the enablement of the SAP Cloud ALM APIs by clicking 'Paste Service Keys'
  - b. Or you can enter the required fields for connecting SAP Cloud ALM manually:
    - i. **Token Endpoint:** Enter the CALM OAuth URL
    - ii. **Client ID:** Enter SAP Cloud ALM client ID
    - iii. **Client Secret:** Enter SAP Cloud ALM client secret
    - iv. Proxy User (if required)
    - v. Proxy Password (if required)
    - vi. Proxy Host (if required)
    - vii. Proxy Port (if required)
  - c. Click 'Ok' to close the pop-up.
4. Enter SAP Cloud ALM root URL as Target URL
5. Enter the background user created as a prerequisite.
6. Click on 'Register'. Upon a successful registration, an ID is retrieved.
7. Activate the use cases as relevant:
  - a. Integration monitoring & Exception monitoring
  - b. Performance Monitoring & Business Process Monitoring

< **SAP** Setup for SAP ALM

More ▾ Exit

Update destination ✓ Delete destination

3. Enter registration target

Target ALM Root URL:

Background User:

Register ✓ System registered at target ALM. LMS\_ID = 8ca80af1-6699-4f09-85cb-08e

Unregister Unregister at target ALM and stop job.

4. Choose usecase(s) to be collected

Activate usecases 4/4 Configured tasks

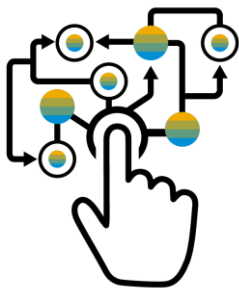


As a result of this exercise, you should see/have SAP ABAP is registered in SAP Cloud ALM



This concludes the steps for this Adoption Lab. To learn more, go to [Integration & Exception Monitoring \(https://support.sap.com/en/alm/sap-cloud-alm/operations/expert-portal/integration-monitoring.html\)](https://support.sap.com/en/alm/sap-cloud-alm/operations/expert-portal/integration-monitoring.html) and/or reach out to SAP





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**THE BEST RUN**

